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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,913	12/28/2001	Katsuji Ikeda	Q67871	2811

7590 03/15/2005

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EXAMINER

CHEN, PO WEI

ART UNIT PAPER NUMBER

2676

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,913

Applicant(s)

IKEDA, KATSUJI

Examiner

Po-Wei (Dennis) Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-8 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-8 and 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/28/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

In response to an Amendment received on November 04, 2004. This action is non-final.

Claims 4-8 and 11-17 are pending in this application. Claim 4 is independent claim.

The present title of the invention is "Internet Moving Image Linking System and Link Recognition Method".

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Palmer (US 5,684,715).

3. Regarding claim 4, Palmer discloses an interactive video system comprising:

An internet moving image linking system (lines 51-67 of column 1) comprising;

a user terminal (lines 43-47 of column 3);

a server (lines 61-63 of column 3; while claim recites server, it is well known in the art that network-based systems utilize server and clients relationship);

a moving image distributor for distributing a moving image to said user terminal (lines 50-54 of column 2 and lines 38-63 of column 3; playback apparatus corresponds to moving image distributor);

an image detector for detecting, based on point time information transmitted from said user terminal, a static image at a corresponding time; and an image recognizer for recognizing a

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specific portion of an image designated by said user based on point coordinate information transmitted from said user terminal and based on said static image detected by said image detector (lines 50-61 of column 2, lines 59-66 of column 4, line 56 of column 5 to line 48 of column 6 and line 35 of column 7 to line 37 of column 8 and Fig. 3-5; the frame which user clicks on corresponds to the static image, and in Fig. 5, the interactive video apparatus functions as an image detector by intercepting the cursor selection on the frame. And it also functions as an image recognizer by matching the selected objects to the video object descriptors based on objects positions and frame number).

4. Regarding claim 17, Palmer discloses an interactive video system comprising:
wherein the specified portion of the image is a moving object in the image (15-59 of column 7 and Fig. 3-5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmer (US 5,684,715) as applied to claim 4 above, and further in view of Astiz et al. (US 5,918,012; refer to as Astiz herein).
7. Regarding claim 5, Palmer does not disclose link point storage, detector and comparator. Astiz disclose a hyperlinking time-based data files system comprising:

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Server comprises: a link point storage for storing link point information (lines 6-19 of column 8; the video map contains the link point information);

a link point detector for detecting a link point at a point time based on point time information and link point information transmitted from said user terminal (lines 6-19 of column 8; the server includes means of spotting the link point (coordinate data on the map) based on the time coordinate and point coordinate clicked by user, thus functions as a link point detector);

and a link point comparator for comparing the coordinate of an image recognized by said image recognizer with the coordinate of a link point detected by said link point detector (lines 36-52 of column 10; the server includes means of comparing the spot (coordinates of the image objects on the frame image recognized based on the point coordinate information) with the link point detected based on time coordinate and point coordinate clicked by user, thus functions as a link point comparator).

It would have been obvious to one of ordinary skill in the art to utilize the teaching of Astiz to provide an simple and easy way to present user a video data that is interactive without other additional software application on the interface browser (lines 14-67 of column 4 of Astiz). Also, both Astiz and Palmer are directed to an interactive video system. By utilizing the teaching of Astiz would allow Palmer to have a better way to present user with interactive hyperlink-related information (lines 51-67 of column 1 of Palmer).

8. Regarding claims 6-7, Palmer discloses an interactive video system comprising:

A point designator for designating a specific point within a moving image (lines 14-27 of column 7 and Fig. 1-2 and 5; the interactive video apparatus captures the cursor position on the frame designated);

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A point coordinate information transmitter for transmitting point coordinate information designated by said point designator to said server; a point time information transmitter for transmitting point time information regarding a point designated by said point designator, to said server (lines 61-63 of column 3, lines 51-66 of column 4 and lines 15-63 of column 7 and Fig. 1-2 and 5; the interactive video application program is responsible for capturing the cursor position on the frame number which can be considered as point time information since frames are displayed in time-based sequence, and the video object descriptors which can be network-based (server) would use the point information for recognizing objects);

Palmer does not disclose a moving image reproducer for reproducing a moving image distributed from said server and server comprises means for transmitting, when said link point comparator issues a coincident result, related information to said user terminal. Astiz discloses a hyperlinking time-based data files system utilizing the method (lines 18-24 and lines 33-56 of column 6 and lines 49-59 of column 10 and Fig. 4; the user terminal utilizes the browser to request downloading the video data file from the server is functioning as reproducing the moving images from the server). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Astiz to provide a simple and easy way to present user a video data that is interactive without other additional software application on the interface browser (lines 14-67 of column 4 of Astiz). Also, both Astiz and Palmer are directed to an interactive video system. By utilizing the teaching of Astiz would allow Palmer to have a better way to present user with interactive hyperlink-related information (lines 51-67 of column 1 of Palmer).

9. Regarding claim 8, Palmer does not disclose server comprises means for continuing, when said link point comparator does not issue a coincident result, to reproduce a moving image

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by said user terminal. Astiz disclose a hyperlinking time-based data files system utilizing the method (lines 34-40 of column 11 and lines 48-49 of column 12; the user will be able to choose to continue to play the video which is to reproduce moving image from the server to the user browser and in the case of no coincident result, a default page will also be displayed). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Astiz to provide an simple and easy way to present user a video data that is interactive without other additional software application on the interface browser (lines 14-67 of column 4 of Astiz). Also, both Astiz and Palmer are directed to an interactive video system. By utilizing the teaching of Astiz would allow Palmer to have a better way to present user with interactive hyperlink-related information (lines 51-67 of column 1 of Palmer).

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palmer (US 5,684,715).

11. Regarding claim 11, Palmer discloses an interactive video system comprising:

wherein the user terminal comprises a point time transmitter for transmitting said point time information and a point coordinate transmitter for transmitting said point coordinate information, wherein said point time information is transmitted separately from said point coordinate information (lines 51-66 of column 4 and line 15 of column 7 to line 37 of column 8; it is noted that the when user clicks on the video, a frame with frame number is first obtained, the frame number corresponds to time since frames are displayed in time-based sequence. And based on the cursor position (point coordinate), the objects are then being obtained). Palmer does not specifically disclose two transmitters and that the point time information and point coordinate information are transmitted separately. However, it would have been a designer's

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choice to modify Palmer by having two transmitters and the information being transmitted separately since the information are used to obtain two different data, one for frame and one for object. Since applicant has not disclose that having two transmitters solves any stated problem and it appears that the system would perform equally well with one transmitter.

12. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmer (US 5,684,715) as applied to claim 4 above, and further in view of Kamen et al. (US 6,570,586; refer to as Kamen herein).

13. Regarding claims 12-13, Palmer does not disclose wherein said linking point storage only stores a link destination for every point designating abrupt change in a movement of a specific portion of an image; wherein when the specific portion of the image is moving linearly, the link point detector interpolates a link destination for said specific portion of the image. Kamen discloses a bandwidth effective method for communicating interactive links utilizing the method (lines 12-45 of column 2, line 61 of column 2 to line 7 of column 3 and lines 5-34 of column 4 and Fig. 3; the object active areas (link destination) are interpolated based on key frames. While claim recites abrupt change, it is clear that between the key frames, active object areas move from frame to frame, see Fig. 3).

14. Regarding claim 14, Palmer does not disclose wherein the link point detector calculates all link destinations for the point time information provided by said user based on relative movement of specific portions of the image. Kamen discloses a bandwidth effective method for communicating interactive links utilizing the method (lines 12-45 of column 2 and line 61 of column 2 to line 7 of column 3; it is noted that the objects active areas (where links are) are calculated based on the movement of the objects in the frames).

15. Regarding claim 15, Palmer does not disclose wherein each said relative movement is calculated based on the link destination of a previous point designating the abrupt change in the movement of the specific portion of the image and the link destination of a next point designating the abrupt change in the movement of the specific portion of the image and wherein the point time information received from the user terminal is between a point time information of the previous point and a point time information of the next point. Kamen discloses a bandwidth effective method for communicating interactive links utilizing the method (line 31 of column 3 to line 34 of column 4; it is noted that the objects active area (where links are) are interpolated between frames. Thus, when user clicked on an object active area in a frame, the active area was interpolated between other frames).

It would have been obvious to utilize the teaching of Kamen in regards to claims 12-15 to provide a method of transmitting interactive video data using reduced bandwidth requirement by only providing active area information for key frames (lines 12-28 of column 2). Both Palmer and Kamen are directed to interactive video system, and by utilizing the teaching of Kamen would allow the Palmer to provide a interactive video system without the requirement of transmitting large amount of data.

16. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palmer (US 5,684,715) as applied to claim 4 above, and further in view of Astiz et al. (US 5,918,012; refer to as Astiz herein) and Kamen et al. (US 6,570,586; refer to as Kamen herein).

17. Regarding claim 16, Palmer does not discloses wherein the link point comparator compares the link destinations of the image with the recognized specific portion of the image designated by said user. Astiz disclose a hyperlinking time-based data files system utilizing the

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method (lines 36-52 of column 10; the server includes means of comparing the spot (coordinates of the image objects on the frame image recognized based on the point coordinate information) with the link point detected based on time coordinate and point coordinate clicked by user, thus functions as a link point comparator). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Astiz to provide a simple and easy way to present user a video data that is interactive without other additional software application on the interface browser (lines 14-67 of column 4 of Astiz).

The combination of Palmer and Astiz does not disclosed the links are calculated. Kamen discloses a bandwidth effective method for communicating interactive links utilizing the method (line 31 of column 3 to line 34 of column 4; it is noted that the objects active area (where links are) are interpolated between frames. Thus, when user clicked on an object active area in a frame, the active area was interpolated between other frames). It would have been obvious to utilize the teaching of Kamen to provide a method of transmitting interactive video data using reduced bandwidth requirement by only providing active area information for key frames (lines 12-28 of column 2). Both Palmer and Kamen are directed to interactive video system, and by utilizing the teaching of Kamen would allow the Palmer to provide a interactive video system without the requirement of transmitting large amount of data.

Response to Arguments

18. Applicant's arguments with respect to claims 4-8 and 11-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

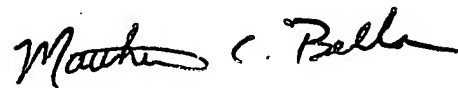
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Po-Wei (Dennis) Chen whose telephone number is (571) 272-7783. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Po-Wei (Dennis) Chen
Examiner
Art Unit 2676

Po-Wei (Dennis) Chen
March 7, 2005



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